

Accessibility going Mainstream

Navigability – Perception Channels
– Synchronization

DAISY and EPUB

www.daisy.org / www.idpf.org

Complex Interplay

between

- ▶ Accessibility of the **content** [books, documents]
- ▶ Accessibility of the **tools that represent the content** [reading systems, web]
- ▶ **Compatibility with assistive technologies** [screen readers]
- ▶ **Users able - enabled** to manage the technologies

Fundamental Requirement

integration of

- ▶ **Navigability** To orientate oneself in a book / document – from simple to highly complex structure [XML]
- ▶ **Perception Channels** seeing, hearing, touching – text, audio, image/video, Braille
- ▶ **Synchronization** of the perception channels [SMIL]

Simple and Complex

- ▶ **SIMPLE** lowly structured content,
continuous text, fiction, type novel
- ▶ **COMPLEX** highly structured content,
schoolbooks, textbooks, sciences, popular non-fiction, graphs, images, tables, indexes, interactivity

Complex (1)

Moteur

4 Du lernst die Zahlen von 13 bis 20.

4A Les nombres de 13 à 20

4B Les loisirs favoris

Qui aime le roller?

... treize, quatorze, quinze, seize, dix-sept, dix-huit, dix-neuf, vingt.

la musique	15	le roller	20
la lecture	13	le théâtre	...
la télé	19	l'ordinateur	...
le cinéma	17	le foot	...

Erstellt eine Hitliste der beliebtesten Hobbys in eurer Klasse.

4C Bingo – nombres et couleurs

Spielmaterial:

- Zahlenkarten von 1 bis 20
- Farbkarten
- Schachtel oder Sack

Spielbeschreibung:

Schreibt in einen Neunerraster beliebige Zahlen von 1 bis 20 oder Farbnamen.

Ein Spielleiter oder eine Spielleiterin zieht aus der Schachtel eine Karte und nennt die entsprechende Farbe oder Zahl.

Die genannten Farben und Zahlen werden abgestrichen.

Gewinner oder Gewinner ist, wer alle Felder durchstreichen konnte. Bingo!

noir	20	rouge
12	1	vert
4	13	9

noir	20	rouge
12	1	vert
4	13	9

Rouge.

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INFO SUISSE ROMANDE

Du erfährst etwas über den Fasnachtsbrauch Les Brandons in Payerne VD.

7

Les Brandons de Payerne

41 jours avant Pâques, c'est le carnaval de Payerne: Les Brandons!

Le vendredi soir: Un groupe masqué écrit des réclamations sur les vitrines des magasins.

Le samedi après-midi: Tout le monde regarde le cortège des classes costumées.

Le samedi matin: Les premières Guggenmusiks font de la musique carnavalesque dans les rues de la ville.

Le lundi après-midi: Des 14 heures, les enfants de la ville vont de bistro en bistro pour chanter.

Le dimanche: Près de 1000 personnes costumées participent au grand cortège humoristique ou satirique.

Le lundi soir: C'est le tour des dames masquées.

Trois jours et trois nuits, Les Brandons de Payerne, c'est le pied*

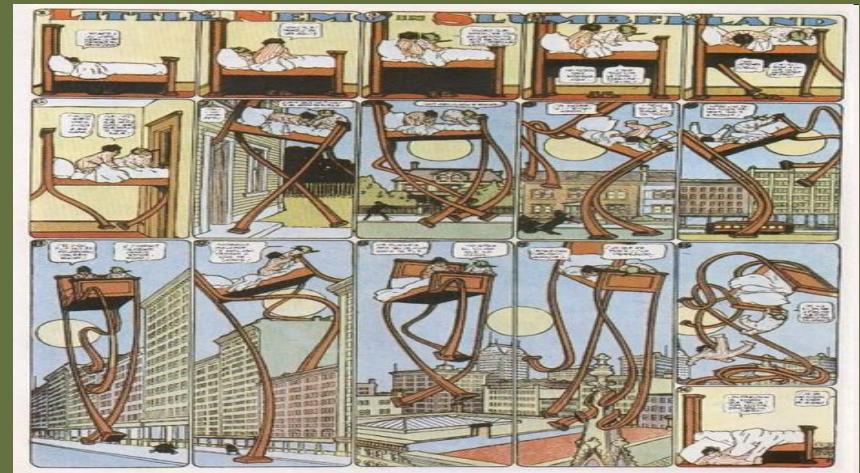
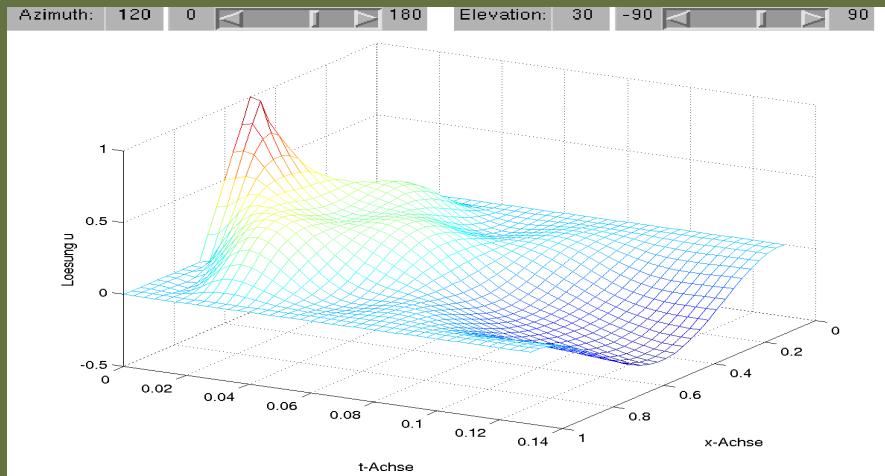
* Das ist total lässig

Bearbeite den Text mit Hilfe der clés magiques.
Du findest sie in der Unité 6 bei der Info Suisse romande.

Gestalte eigene Lernkarten zum Thema Fasnacht.
Ihre Bedeutung findest du im alphabetischen Wörterverzeichnis dieses Buches.

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Complex (2)



$$H_{i,j} = \sum_{s=1}^{N \cdot 12 - 1} a_k \cos(s \cdot \alpha); \text{ mit } (k = s \bmod 12)$$

Accessible Information

is

navigable synchronized multimedia

DAISY STANDARD

- ▶ **DAISY** Consortium, (*1996) www.daisy.org/
- ▶ **DAISY** Standard www.daisy.org/daisy-standard - universal design, open source
- ▶ **DAISY** Tools - open source
 - Format conversion: DAISY Pipeline www.daisy.org/pipeline2/
 - Content production: DAISY Tobi / Obi www.daisy.org/project/tobi
 - Playback: DAISY Amis www.daisy.org/amis?q=project/amis
- ▶ **DAISY** out of word processors ("Save as DAISY")
 - MS Word www.daisy.org/project/save-as-daisy-microsoft-word-add-in
 - OpenOffice: www.daisy.org/project/save-as-daisy-openoffice.org

EPUB

- ▶ **THE** eBook distribution format standard for digital mainstream publishing [XML based]
- ▶ The standard is developed by the publishing industry (International Digital Publishing Forum, IDPF, not-for-profit organization, www.idpf.org).

DAISY 4 and EPUB 3 (I)

- ▶ Major DAISY and EPUB revisions were / are developed in parallel (2010 / 2011)
 - EPUB 3 proposed specification released [XML and web based, e.g. alignment with HTML5]
www.idpf.org/epub3_proposed_spec_released
 - DAISY 4 standard for trial use released [authoring and interchange, XML based www.daisy.org/z3986/2011/
- ▶ Formal approval of both standards: summer / fall 2011

DAISY 4 and EPUB 3 (II)

- **EPUB 3 supports** (among other things)
 - portability across devices and reading systems
 - navigation
 - synthesized speech pronunciation
 - text-audio synchronization (full-text full audio)
 - different writing systems (right/left, left/right, vertical)
 - MathML
- **Fundamental accessibility requirements** following the DAISY way are supported in EPUB 3

“Every eBook can be a fully accessible eBook”

- ▶ “I’m particularly delighted that EPUB 3 marks the mainstreaming of accessibility capabilities within the universal commercial digital publication format standard – now every eBook can be a fully accessible eBook.” [George Kerscher, President of the IDPF and Secretary General of the DAISY Consortium]

Milestone

- ▶ DAISY 4 for the **production** of accessible digital content
- ▶ EPUB 3 for the **distribution** of accessible digital content

- ▶ = **merger** of DAISY distribution and EPUB
- ▶ = **one single** distribution standard

QUESTION and ANSWER

- ▶ Will the mainstream take on the accessibility **capabilities** of the EPUB 3?
- ▶ There will be **more** or **less accessible** EPUB 3 products – but it is EPUB (common reference, facilitating ongoing improvements, enrichments, incremental integration of accessibility)
- ▶ **Problem areas:** interactivity, MathML, SVG, image descriptions, animations, and more.

Recommendation I

► Strong participation in global (accessibility) standardization processes

- strengthen the unified influence regarding accessibility requirements (instead of fragmentation)
- promote global approach (instead of regional approach)
- promote universal design (instead of multiple standards for different “special needs”)
- become member of the DAISY Consortium www.daisy.org
- become member of the IDPF www.idpf.org

Recommendation II

► **Support** the mainstream publishing industry as it moves towards digital publishing

- bring together the mainstream publishing industry and the specialized agencies for the production of accessible content
- “Accessible Publishing – Best Practice Guidelines for Publishers” www.editeur.org/109/Enabling-Technologies-Framework/
- „Accessibility Newsletter“ (Publishers Licensing Society)
www.pls.org.uk/services/accessibility1/Pages/accessibilitynewsletter.aspx?PageView=Shared

Recommendation III

► Set **mandatory requirements** – legislation, public procurement policies

- based on universally adopted mainstream and accessibility standards
- the mainstream production of accessible digital content is not longer “impossible”
- pay special attention to educational material (school- and textbook publishers)

Recommendation IV

► Invest in **Education, Formation, Training, Technical Support** for a variety of target groups

- develop appropriate guidelines, best practices, webinars, workshops etc.
- publishers (policy makers and practitioners) – service providers that help kids and students to get accessible learning material - teachers and professors – individual end users
- public administrations

Recommendation V

- **Invest** in research and development, particularly in the fields of
 - accessibility of **non-textual content** (standardization and applications), see for instance the DIAGRAM project
www.diagramcenter.org/
 - **text-to-speech technology** (TTS)
 - much more languages, better quality, cheaper developments
 - will benefit language minorities, illiterates, print disabled
 - see for instance www.asrnews.com/ and
www.asrnews.com/TTS_acc_website.pdf

Thank you for your attention!
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